INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

MINOR SOURCE OPERATING PERMIT

OFFICE OF AIR QUALITY
AND
CITY OF INDIANAPOLIS, OFFICE OF ENVIRONMENTAL SERVICES

Central Corrugated
5645 W. 82nd Street
Indianapolis, Indiana 46278

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: MSOP 097-16885-00312	
Issued by: John B. Chavez, Administrator	Issuance Date: 04-03-2003 Expiration Date: 04-03-2008

First Minor Permit Revision: 097-17950-00312	Pages Affected: 4, 5, 17, 18, 18a
Issued by: Originally signed by John B. Chavez John B. Chavez, Administrator	Issuance Date: 10-10-2003

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and the City of Indianapolis, Office of Environmental Services (OES). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary corrugated paper and paperboard products manufacturing plant.

Authorized Individual:	General Manager
Source Address:	5645 W. 82nd Street, Indianapolis, Indiana 46278
Mailing Address:	5645 W. 82nd Street, Indianapolis, Indiana 46278
General Source Phone:	(317) 875-5555
SIC Code:	2679
County Location:	Marion
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 source categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) Cleaver Brooks natural gas fired boiler (identified as EU1), with a maximum capacity of 25.106 MMBtu/hour, exhausting to stack ID 1. This unit was installed in 1994.

(b) Starch handling and storage including one (1) Vortx starch silo (identified as EU3), with a maximum capacity of 24,000 lbs/hour, using a bin vent bag filter as control (identified as CE2), and exhausting to stack ID 3. This unit was installed in 2000.

(c) One (1) international paper box company right angle gluer (identified as G-4), with a maximum capacity of 85,000 sheets/hour, exhausting to stack ID 2. This unit was installed in March 2002.

(d) One (1) Marquip/Peters corrugator (identified as EU2), with a maximum capacity of 15.4 tons per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit was installed in 1977.

(e) Two (2) Bobst flatbed diecutters (identified as DC-5 and DC-6), emission unit DC-5 has a maximum capacity of 5,700 lbs of cardboard sheets per hour and emission unit DC-6 has a maximum capacity of 5,130 lbs of cardboard sheets per hour. These units are connected to the pneumatic scrap cardboard collection system. These units were installed in March 2002.

(f) One (1) Bobst flatbed diecutter (identified as DC-7), with a maximum capacity of 5,700 lbs of cardboard sheets per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit will be installed in 2003.

(g) One (1) Bobst flatbed diecutter, identified as DC-8, with a maximum capacity of 5,000 sheets per hour (5,700 lbs of cardboard sheets per hour), exhausting to the pneumatic scrap cardboard collection system (cyclone), identified as CE1, which exhausts at one (1) stack, identified as stack 2.

(h) One (1) pneumatic collection system used to collect scrap cardboard pieces from the corrugater (EU2) and diecutters (DC-5, DC-6, DC-7 and DC-8). The pneumatic collection system uses a cyclone, installed in 2002, identified as CE1, to collect the scrap materials. The cyclone, which exhausts at stack ID 2, is integral to the collection system. The scrap collection was installed in 1977 and upgraded in 2002.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(b) Starch handling and storage including one (1) Vortx starch silo (identified as EU3), with a maximum capacity of 24,000 lbs/hour, using a bin vent bag filter as control (identified as CE2), and exhausting to stack ID 3. This unit was installed in 2000.

(d) One (1) Marquip/Peters corrugator (identified as EU2), with a maximum capacity of 15.4 tons per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit was installed in 1977.

(e) Two (2) Bobst flatbed diecutters (identified as DC-5 and DC-6), emission unit DC-5 has a maximum capacity of 5,700 lbs of cardboard sheets per hour and emission unit DC-6 has a maximum capacity of 5,130 lbs of cardboard sheets per hour. These units are connected to the pneumatic scrap cardboard collection system. These units were installed in March 2002.

(f) One (1) Bobst flatbed diecutter (identified as DC-7), with a maximum capacity of 5,700 lbs of cardboard sheets per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit will be installed in 2003.

(g) One (1) Bobst flatbed diecutter, identified as DC-8, with a maximum capacity of 5,000 sheets per hour (5,700 lbs of cardboard sheets per hour), exhausting to the pneumatic scrap cardboard collection system (cyclone), identified as CE1, which exhausts at one (1) stack, identified as stack 2.

(h) One (1) pneumatic collection system used to collect scrap cardboard pieces from the corrugater (EU2) and diecutters (DC-5, DC-6, DC-7 and DC-8). The pneumatic collection system uses a cyclone, installed in 2002, identified as CE1, to collect the scrap materials. The cyclone, which exhausts at stack ID 2, is integral to the collection system. The scrap collection was installed in 1977 and upgraded in 2002.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the four (4) diecutters, starch silo and corrugater shall not exceed the pounds per hour limits shown in the following table.

Facility	Process Weight (tons/hr)	Process Weight (lbs/hr)	Allowable Particulate Emissions (lbs/hour)	
flatbed diecutter (DC-5)	2.85	5,700	8.27	32.53
flatbed diecutter (DC-6)	2.57	5,130	7.72	
flatbed diecutter (DC-7)	2.85	5,700	8.27	
flatbed diecutter (DC-8)	2.85	5,700	8.27	
Corrugator	15.4	135,000	34.3	
Starch Silo	12.0	24,000	21.7	

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by the use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(b) If the actual emissions of particulate from the source exceeds ten (10) tons per twelve (12) consecutive month period, then pursuant to 326 IAC 6-1-2(a) (Non-attainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from the four (4) diecutters, starch silo and corrugator shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the starch silo and its control device.

Compliance Determination Requirements

D.2.3 Particulate Control

(a) Pursuant to Registration 097-15013-00312, issued on February 26, 2002, and in order to comply with D.2.1, the cyclones used to control particulate emissions shall be in operation and control emissions from the corrugator, diecutters and associated pneumatic scrap collection system at all times that these facilities are in operation.

(b) In order to comply with D.2.1, the baghouse used to control particulate emissions from the starch silo shall be in operation and control emissions from the starch silo at all times this facility is in use.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a violation of this permit.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

D.2.5 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a violation of this permit.

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD) for a Minor Permit Revision to a Minor Source Operating Permit

Source Background and Description

Source Name:	**Central Corrugated**
Source Location:	**5645 W. 82nd Street, Indianapolis, Indiana 46278**
County:	**Marion**
SIC Code:	**2679**
Operation Permit No.:	**MSOP 097-16885-00312**
Operation Permit Issuance Date:	**April 3, 2003**
Permit Revision No.:	**MPR 097-17950-00312**
Permit Reviewer:	**Linda Quigley/EVP**

The Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) has reviewed a revision application from Central Corrugated relating to the construction and operation of the following:

One (1) Bobst flatbed diecutter, identified as DC-8, with a maximum capacity of 5,000 sheets per hour (5,700 lbs of cardboard sheets per hour), exhausting to the pneumatic scrap cardboard collection system (cyclone), identified as CE1, which exhausts at one (1) stack, identified as stack 2.

In addition, Central Corrugated requests that the descriptive information for the pneumatic collection system used to collect scrap cardboard pieces be corrected. The initial system was installed in 1977 and was upgraded in 2002 with a new cyclone.

History

On September 9, 2003, Central Corrugated submitted an application to the OES requesting to add an additional flatbed diecutter to their existing plant. Central Corrugated was issued a Minor Source Operating Permit on April 3, 2003.

Existing Approvals

The source was issued a Minor Source Operating Permit, MSOP 097-16885-00312 on April 3, 2003.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Rectangular Stack (feet)	Flow Rate (acfm)	Temperature (^{0}F)
2	EU2, DC-5 through DC-8	53	3'6" x 11'	50,000	70

Recommendation

The staff recommends to the Commissioner that the Minor Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 9, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations, one (1) page.

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	5.91
PM-10	5.91
SO_2	0.00
VOC	0.00
CO	0.00
NO_x	0.00

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

There are no HAPs emitted from this modification.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)	Single HAP (ton/yr)	Total HAPs (ton/yr)
Existing	35.83	35.83	0.07	2.09	9.24	11.00	0.745	2.23
Proposed Modification	5.91	5.91	0.00	0.00	0.00	0.00	0.00	0.00
Total	41.74	41.74	0.07	2.09	9.24	11.00	0.745	2.23
PSD or Offset Threshold Level	250	250	250	250	250	250	--	--

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Justification for Modification

The Minor Source Operating Permit is being modified through a Minor Permit Revision. This modification is being performed pursuant to 326 IAC 2-6.1-6(g)(4)(A) for modifications for which the potential to emit is less than twenty-five (25) tons per year and equal to or greater than five (5) tons per year of either particulate matter (PM) or particulate matter less than ten (1) microns (PM10).

Actual Emissions

Pollutant	Emissions (ton/yr)
PM	3.0
PM10	3.0
SO_2	0.0
VOC	0.0
CO	1.0
NO_x	2.0

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) These emissions were based on the 2001 Emissions Summary Report for the source.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO_2	maintenance
NO_2	attainment
Ozone	maintenance
CO	attainment
Lead	maintenance

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as maintenance for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Marion County has been classified as attainment, maintenance or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This status is based on calculations from the Minor Source Operating Permit (Appendix A) and information provided by the source for this modification.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

Since this source was constructed prior to 1979 and had a potential to emit air pollutants that were less than 250 tons per year, it was an existing minor source under PSD. It is not one of the twenty-eight (28) listed source categories. Although this source has been modified since its construction, none of the modifications triggered PSD review and the source remained a minor source. The construction of the new flatbed diecutter will result in only a small increase in emissions and the potential to emit for the entire source will remain below the 250 tons per year PSD threshold. Therefore, the source is not subject to the requirements of 326 IAC 2-2.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Marion County and has the potential to emit more than ten (10) tons per year of NOx. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (County Specific Particulate Matter Limitations)

Pursuant to 326 IAC 6-1-1 (Applicability), specifically listed sources or facilities, or sources or facilities not specifically listed but located in a listed county and having either a potential to emit (PTE) one hundred (100) tons per year (tpy) or more or actual emissions of ten (10) tpy or more of particulate matter (PM), are subject to the applicable limitation(s).

The source is located in Marion County which is a specifically listed county. The source and its facilities are not specifically listed at 326 IAC 6-1-12 and, therefore, these rules do not apply. The PTE of PM for the source is less than 100 tpy, and actual PM emissions are less than 10 tpy. Therefore, the requirements of 326 IAC 6-1 do not apply.

326 IAC 6-4-1 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4-1, this source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right of way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source does not have the potential to emit 10 tons per year of any HAP or 25 tons per year of the combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the particulate from the four (4) flatbed diecutters, identified as DC-5, DC-6, DC-7 and DC-8, all exhausting through one (1) common stack, identified as stack 2, shall be limited as follows:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Source ID	Source Description	Process Weight Rate (ton/hr)	Allowable Emissions (lb/hr)		Uncontrolled Emissions (lb/hr)		Compliance with 326 IAC 6-3-2 (Y/N)
DC-5	flatbed diecutter	2.85	8.27	32.53	5.91	23.64	Y
DC-6	flatbed diecutter	2.57	7.72		5.91		Y
DC-7	flatbed diecutter	2.85	8.27		5.91		Y
DC-8	flatbed diecutter	2.85	8.27		5.91		Y

Note: The allowable emission rate was added together for one overall limit because four (4) flatbed diecutters all exhaust through one (1) common stack.

Testing Requirements

There are no testing requirements applicable to this source. The previous approvals issued to this source did not include any testing requirements.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this modification because the new emission unit is controlled by a cyclone and the allowable particulate emissions are less than ten (10) pounds per hour.

Proposed Changes

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) Cleaver Brooks natural gas fired boiler (identified as EU1), with a maximum capacity of 25.106 MMBtu/hour, exhausting to stack ID 1. This unit was installed in 1994.

(b) Starch handling and storage including one (1) Vortx starch silo (identified as EU3), with a maximum capacity of 24,000 lbs/hour, using a bin vent bag filter as control (identified as CE2), and exhausting to stack ID 3. This unit was installed in 2000.

(c) One (1) international paper box company right angle gluer (identified as G-4), with a maximum capacity of 85,000 sheets/hour, exhausting to stack ID 2. This unit was installed in March 2002.

(d) One (1) Marquip/Peters corrugator (identified as EU2), with a maximum capacity of 15.4 tons per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit was installed in 1977.

(e) Two (2) Bobst flatbed diecutters (identified as DC-5 and DC-6), emission unit DC-5 has a maximum capacity of 5,700 lbs of cardboard sheets per hour and emission unit DC-6 has a maximum capacity of 5,130 lbs of cardboard sheets per hour. These units are connected to the pneumatic scrap cardboard collection system. These units were installed in March 2002.

(f) One (1) Bobst flatbed diecutter (identified as DC-7), with a maximum capacity of 5,700 lbs of cardboard sheets per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit will be installed in 2003.

(g) **One (1) Bobst flatbed diecutter, identified as DC-8, with a maximum capacity of 5,000 sheets per hour (5,700 lbs of cardboard sheets per hour), exhausting to the pneumatic scrap cardboard collection system (cyclone), identified as CE1, which exhausts at one (1) stack, identified as stack 2.**

~~(g)~~**(h)** One (1) pneumatic collection system used to collect scrap cardboard pieces from the corrugater (EU2) and diecutters (DC-5, DC-6, ~~and~~ DC-7 **and DC-8**). The pneumatic collection system uses a cyclone, **installed in 2002,** identified as CE1, to collect the scrap materials. The cyclone, which exhausts at stack ID 2, is integral to the collection system. The scrap collection was installed in 1977 **and upgraded in 2002.**

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(b) Starch handling and storage including one (1) Vortx starch silo (identified as EU3), with a maximum capacity of 24,000 lbs/hour, using a bin vent bag filter as control (identified as CE2), and exhausting to stack ID 3. This unit was installed in 2000.

(d) One (1) Marquip/Peters corrugator (identified as EU2), with a maximum capacity of 15.4 tons per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit was installed in 1977.

(e) Two (2) Bobst flatbed diecutters (identified as DC-5 and DC-6), emission unit DC-5 has a maximum capacity of 5,700 lbs of cardboard sheets per hour and emission unit DC-6 has a maximum capacity of 5,130 lbs of cardboard sheets per hour. These units are connected to the pneumatic scrap cardboard collection system. These units were installed in March 2002.

(f) One (1) Bobst flatbed diecutter (identified as DC-7), with a maximum capacity of 5,700 lbs of cardboard sheets per hour. This unit is connected to the pneumatic scrap cardboard collection system. This unit will be installed in 2003.

(g) **One (1) Bobst flatbed diecutter, identified as DC-8, with a maximum capacity of 5,000 sheets per hour (5,700 lbs of cardboard sheets per hour), exhausting to the pneumatic scrap cardboard collection system (cyclone), identified as CE1, which exhausts at one (1) stack, identified as stack 2.**

~~(g)~~**(h)** One (1) pneumatic collection system used to collect scrap cardboard pieces from the corrugater (EU2) and diecutters (DC-5, DC-6, ~~and~~ DC-7 **and DC-8**). The pneumatic collection system uses a cyclone, **installed in 2002,** identified as CE1, to collect the scrap materials. The cyclone, which exhausts at stack ID 2, is integral to the collection system. The scrap collection was installed in 1977 **and upgraded in 2002.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the ~~three (3)~~ **four (4)** diecutters, starch silo and corrugater shall not exceed the pounds per hour limits shown in the following table.

Facility	Process Weight (tons/hr)	Process Weight (lbs/hr)	**Allowable** Particulate Emissions ~~Limit~~ (lbs/hour)	
~~Three (3) Diecutters~~	~~8.27~~	~~16,530~~	~~16.87~~	
flatbed diecutter (DC-5)	**2.85**	**5,700**	**8.27**	**32.53**
flatbed diecutter (DC-6)	**2.57**	**5,130**	**7.72**	
flatbed diecutter (DC-7)	**2.85**	**5,700**	**8.27**	
flatbed diecutter (DC-8)	**2.85**	**5,700**	**8.27**	
Corrugator	15.4	135,000	34.3	
Starch Silo	12.0	24,000	21.7	

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by the use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) If the actual emissions of particulate from the source exceeds ten (10) tons per twelve (12) consecutive month period, then pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Emission Limitations for General Sources), the particulate matter emissions from the ~~three (3)~~ **four (4)** diecutters, starch silo and corrugator shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

Conclusion

The operation of the new flatbed diecutter shall be subject to the conditions of the attached proposed Minor Permit Revision No. MPR097-17950-00312.

Appendix A: Emissions Calculations
Particulate Matter Emissions from One (1) New Flatbed Diecutter

Company Name: Central Corrugated
Address City IN Zip: 5645 W. 82nd St., Indianapolis, IN. 46278
MSOP Revision No.: 097-17950
Plt ID: 097-00312
Reviewer: Linda Quigley/EVP
Application Rec.: September 9, 2003

Maximum amount of scrap from Diecutter (DC-8) in lbs/hr	1500
Maximum amount of scrap from Diecutter (DC-8) in ton/yr	6570

*Emission factor for PM/PM_{10} in lbs/ton	1.8
Potential to emit of PM/PM_{10} in tons/yr	5.91

*No Ap-42 emission factor available for this operation. Emission Factor based on cyclone test data provided by the source.

METHODOLOGY

Maximum scrap (tons/yr) = 1500 lbs scrap/hr *8760 hrs/yr *1ton/2000lbs
PTE of Particulate matter (tons/yr) = Maximum Scrap (tons/yr) * Emission Factor (lbs/ton) * 1ton/2000 lbs